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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,236	06/26/2003	Shun-ichi Ishikawa	Q76184	4220
23373	7590	10/27/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			HON, SOW FUN	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/606,236

Applicant(s)

ISHIKAWA, SHUN-ICHI

Examiner

Sow-Fun Hon

Art Unit

1772

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 October 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 18 October 2006. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See attachment to advisory action.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☒ Other: Advisory Action, PTO-892.

Advisory Action

1. The request for reconsideration dated 10/18/06, has been fully considered, but fails to place the application in condition for allowance. Applicant's arguments are addressed below.

2. Applicant argues that Matsuo does not teach the use of polyethylene naphthalate in the working examples, merely listing polyethylene naphthalate as one of the many preferable materials for the substrate, while polyethylene terephthalate is exemplified as a preferable material for the substrate.

Applicant is respectfully apprised that disclosed examples do not constitute a teaching away from a broader disclosure. See MPEP 2123.

3. Applicant argues that that in the Rule 132 declaration filed 01/26/06, polyethylene naphthalate is in fact much superior to polyethylene terephthalate with respect to gas properties in the context of the present invention, and is thus an unexpectedly superior result.

Applicant is respectfully reminded that Applicant's declaration only used comparative base films of polyethylene terephthalate mixed with a comparative polyester copolymer C, to generate the comparative data. Thus the comparative data presented by the declaration is not commensurate with the scope of the prior art, which teaches polyethylene naphthalate as a preferable material for the substrate, while exemplifying polyethylene terephthalate as one of the preferable materials. Furthermore, the superior gas barrier properties of polyethylene naphthalate over polyethylene terephthalate are not unexpected, the fact being well known in the art,

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where polyethylene terephthalate is used more often in production quantities due to its lesser cost, as evidenced by US 5,281,360 (column 2, lines 18-22).

4. Applicant argues that Pinnavaia does not disclose any specific advantage or benefit obtained when the inorganic layered compound of Pinnavaia is used as a barrier film agent, and in addition, does not disclose whether the inorganic layered compound can be used in the substrate/base film or in a layer to form a barrier film, and hence does not provide any teaching that would motivate one of ordinary skill in the art to specifically select the inorganic layered compound as a barrier film agent from the various agents disclosed in Pinnavaia for use in the substrate of Matsuo.

Applicant is respectfully apprised that the primary reference, Matsuo, teaches a gas barrier film having an inorganic coating layer (thin film layer, column 3, lines 15-20) and an organic-inorganic hybrid coating layer (composition containing a polymer and at least one hydrolyzate of a metal alkoxide, column 3, lines 15-25), provided on a substrate film material made of polyethylene naphthalate (column 5, lines 49-56), and that while Matsuo fails to teach that the substrate film is further reinforced by an inorganic layered compound, it is well established in the art that substrates are used to provide structural reinforcement to the laminate. It follows that the secondary reference, Pinnavaia, in teaching that the inorganic layered compound functions as both a barrier film agent and a polymer reinforcing agent (column 10, lines 40-45), provides the motivation to use the inorganic layered compound in the substrate film of Matsuo, to obtain an improved substrate with both the desired structural reinforcement and enhanced gas barrier properties.

5. Applicant argues that Pinnavaia discloses a polymer reinforcement agent as being different from a barrier film agent.

Applicant is respectfully apprised that Pinnavaia is actually teaching the various uses of the same inorganic layered compound corresponding to its various inherent properties.

6. Applicant argues that Pinnavaia does not disclose that such polymer-clay nanocomposites can be used as a substrate for a barrier film.

Applicant is respectfully apprised that in teaching that the inorganic layered compound is used as a polymer reinforcing agent, Pinnavaia provides the motivation for it to be used in a polymer substrate for the purpose of providing structural reinforcement to the substrate, as discussed above, in additionally teaching that the inorganic layered compound is also used as a barrier agent, Pinnavaia provides the motivation for it to be used in the polymer substrate for a barrier film.

7. Applicant argues that Matsuo fails to disclose the use of polymer-clay nanocomposites as substrates for the barrier film.

Applicant is respectfully apprised that Pinnavaia provides the motivation as discussed above.

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Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Hon
Sow-Fun Hon

10/20/06

[Signature]
RENA DYE
SUPERVISORY PATENT EXAMINER
Tech Center 1700
10/24/06